

Appl. No. 10/684,108
Examiner: Asok K. Sarkar, Art Unit 2891
In response to the Office Action dated April 7, 2005

Date: July 7, 2005
Attorney Docket No. 10113041

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A method for multi-layer alignment of a semiconductor substrate with alignment marks, comprising:

forming a first layer with first alignment marks on the semiconductor substrate, wherein the first alignment marks are separated parallelly by a predetermined distance;

forming a second layer with second alignment marks on the first layer, wherein the second alignment marks are separated parallelly by a predetermined distance;

measuring the shift distance of each first alignment mark caused by substrate deformation to calculate a first midpoint between the first alignments;

measuring the shift distance of each second alignment mark caused by substrate deformation to calculate a second midpoint between the second alignments; and

calculating a third midpoint acting as a datum point between the first midpoint and the second midpoint.

Claim 2 (original): The method for multi-layer alignment as claimed in claim 1, wherein the second alignment marks and the first alignment marks overlap partially.

Claim 3 (currently amended): A method for multi-layer alignment for a semiconductor substrate with alignment marks, comprising:

forming a first layer with first alignment marks on the semiconductor substrate, wherein the first alignment marks are separated parallelly by a predetermined distance;

forming a second layer with second alignment marks on the first layer, wherein the second alignment marks are separated parallelly by a predetermined distance, and the second alignment marks and the first alignment marks are alternately disposed;

measuring the shift distance of each first alignment mark caused by substrate deformation to calculate a first midpoint between the first alignments;

measuring the shift distance of each second alignment mark caused by substrate deformation to calculate a second midpoint between the second alignments; and

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calculating a third midpoint acting as a datum point between the fist midpoint and the second midpoint.

Claim 4 (original): The method for multi-layer alignment as claimed in claim 3, wherein the second alignment marks and the first alignment marks overlap partially.

Claim 5 (canceled)